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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,763	11/20/2003	Johan Cuperus	P/1336-184	8367

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EXAMINER

LAU, HOI CHING

ART UNIT	PAPER NUMBER
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2636

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,763

Applicant(s)

CUPERUS ET AL.

Examiner

Hoi C. Lau

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,9-11,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,9-11,13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 2, 3, 9-11, 13 and 14 have been considered but are moot in view of the new ground(s) of rejection. Following is applicant's arguments:

- a. Berthon's enclosure is not made of metal.
- b. Kunert, Hamel and Finkenzeller do not teach a metallic enclosure enclosing an electronic control circuit.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 2 is rejected under 35 U.S.C. 102(e) as being anticipated by East (U.S. 6,556,140).

Regarding **claim 2**, East teaches a reader with an antenna and comprising a metallic enclosure, wherein the antenna is protected from the environment by a metallic front plate (36) that is integral with the enclosure containing the electronic circuit (column 3, lines 16-22).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over East (U.S. 6,556,140) in view of Kunert et al. (U.S. 6,109,528).

East teaches a reader comprises with a metal enclosure (see rejection of claim 1).

However, he fails to show the metallic enclosure is a hermetical closure.

Kunert's device is enclosed in a hermetical housing (column 1, lines 57-60)

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to combine the teaching of a hermetical housing of Kunert with East's metallic enclosure because it would prevent damage to their internal electronic components against humidity and water while maintain the advantages of robustness and strong resistance against vandalism from the metallic enclosure.

4. Claims 9, 10 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over East (U.S. 6,556,140) in view of Hamel et al. (U.S. 2004/0113790).

As to **Claim 9**, East meets the limitation of claim and it states that the associated circuitry and components of reader are enclosed with housing (column 3, lines 20-21). However, it fails to mention the specific components within device.

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It would have been obvious to one of ordinary skill in the art the associated circuitry may includes electronic control circuit which is associated with a reception circuit because it requires at least a circuit to identify and control the received signal from transponder.

Hamel's system shows the use of differentiating filter for reception purpose (Fig. 9-11)

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to implement the teaching of differentiating filter of Hamel with the teaching of reader enclosure along with electronic circuitry of East because the differentiating filter would envelope the demodulated signals from the antenna and compare the received value with the threshold and prosecute further operation based on values.

As to **Claim 10**, East's device meets all the limitation of claims except it fails to shows the range of carrier frequency and the thickness of the stainless steel wall.

Hamel's system teaches the carrier wave is between 20 and 50KHz (page 6, paragraph 89-90) and the enclosure is made of stainless steel (page 6, paragraph 89).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to implement the carrier frequency range of Hamel into the teaching of East since both enclosures are made of metal and it would been obvious to understand the frequency range is adjusted according to the type of metals and their thickness.

As to **Claim 14**, East meets the limitation of claim except it fails to show Q factor information associates with reader.

Hamel shows the Q factor of the resonant antenna is degraded in a controlled manner by a resistance for the transponder (page 4, paragraph 69-70).

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It would have been obvious to one of ordinary skill in the art at the time the conventional communication system use the same Q factor for both transponder and reader within a specific environmental function.

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to implement the teaching of Q factor of Hamel with East's reader because it would ensure the quality of signal transmission between transponder and reader.

5. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over East (U.S. 6,556,140) in view of Finkenzeller (RFID Handbook – Radio Frequency Identification Fundamentals and Application).

The combination teaches the use of resonance and carrier frequency of the antenna within a metallic enclosure. It fails to show the resonance frequency is 5-20% higher than that of the carrier.

Finkenzeller's handbook states that the system with anti-collision procedures where the resonant frequency selected for the transponder is often 5 – 20% higher which is represented in mathematic expression.

It would have been obvious to one of ordinary skill in the art at the time the resonance frequency is higher than the carrier because it would minimize the effect of the interaction of transponders on overall performance.

It would have been obvious to one of ordinary skill in the art at the time the conventional communication system use the same resonance frequency range for both transponder and reader within a specific environmental function.

6. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over East (U.S. 6,556,140) in view of Berthon (U.S. 5,864,323).

East meets the limitation of claim except it fails to specifically mention the shape and structure of antenna.

Berthon teaches the antenna has coils which are rectangular in cross-section with the large side of the coil closely coupled to the metallic wall of the enclosure (Fig. 11 and column 6, lines 15-21).

It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to modify the antenna of East into the shape as the teaching of Berthon because it would allow the magnetic flux line easier to penetrate the metallic enclosure and increase the reception performance.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

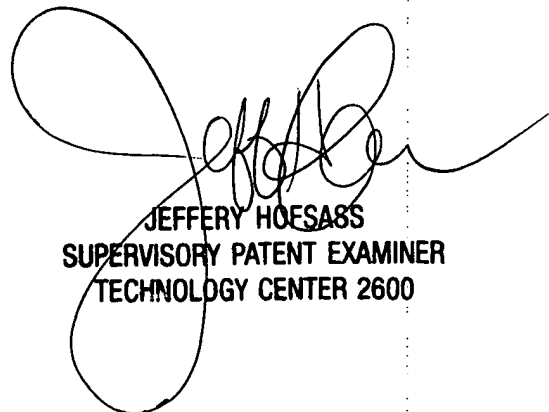
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoi C. Lau whose telephone number is (571)272-8547. The examiner can normally be reached on M- F 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (571)272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoi Ching Lau
Art Unit 2636



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